

CLAIMS

1. A method of treating a power transmission belt/belt sleeve of the type having an endless body with a length extending around an axis and a radially inwardly facing surface and a radially outwardly facing surface, said method comprising the steps of:

wrapping at least one sheet of vapor-impervious film against and around the radially outwardly facing surface of the belt/belt sleeve body; and

vulcanizing the belt/belt sleeve with the at least one sheet of vapor-impervious film wrapped around the belt/belt sleeve body.

2. The method of treating a power transmission belt/belt sleeve according to claim 1 wherein the belt/belt sleeve body has axially spaced, axially facing ends and the step of wrapping comprises the step of wrapping at least one sheet of vapor-impervious film over at least part of each of the axially spaced, axially facing ends of the belt/belt sleeve body.

3. The method of treating a power transmission belt/belt sleeve according to claim 1 further including the step of mounting the belt/belt sleeve on a mold and the step of vulcanizing comprises the step of vulcanizing the belt/belt sleeve with the belt/belt sleeve mounted on the mold.

2 4. The method of treating a power transmission belt/belt sleeve according to claim 1 further including the step of removing the at least one sheet of vapor-impervious film from the belt/belt sleeve body after vulcanizing the belt/belt sleeve.

2 5. The method of treating a power transmission belt/belt sleeve according to claim 4 including the step of treating the radially outwardly facing surface of the belt/belt sleeve body after removing the at least one sheet of vapor-impervious film.

6. The method of treating a power transmission belt/belt sleeve according to 5 wherein the step of treating comprises the step of grinding the radially outwardly facing surface of the belt/belt sleeve body.

7. The method of treating a power transmission belt/belt sleeve according to claim 6 wherein the step of grinding comprises the step of grinding at least two grooves in the belt/belt sleeve body through the radially outwardly facing surface to define at least one V-shaped rib extending along the length of the belt/belt sleeve body.

2 8. The method of treating a power transmission belt/belt sleeve according to claim 1 including the step of forming alternating grooves and teeth along the length of the belt/belt sleeve body.

2 9. The method of treating a power transmission belt/belt sleeve according
4 to claim 8 wherein the step of forming alternating grooves and teeth comprises the
6 step of forming alternating grooves and teeth at the radially inwardly facing surface
of the belt/belt sleeve body and further including the steps of removing the at least
one sheet of vapor-impervious film from the belt/belt sleeve body after vulcanizing
the belt/belt sleeve and grinding the radially outwardly facing surface of the belt/belt
sleeve body after removing the at least one sheet of vapor-impervious film.

2 10. The method of treating a power transmission belt/belt sleeve according
4 to claim 1 wherein the step of wrapping at least one sheet of vapor-impervious film
6 comprises the step of wrapping at least one sheet of vapor-impervious film that
comprises synthetic resin.

2 11. The method of treating a power transmission belt/belt sleeve according
4 to claim 1 wherein the belt/belt sleeve body has axially spaced, axially facing ends
6 which join to the radially outwardly facing surface of the belt/belt sleeve body at
first and second corners and further including the step of applying a sealing material
in addition to the vapor-impervious film at at least one of the first and second
corners prior to vulcanizing the belt/belt sleeve.

2 12. The method of treating a power transmission belt/belt sleeve according
to claim 11 wherein the step of applying a sealing material comprises the step of

4 applying a fibrous sealing material that comprises at least one of rubber-impregnated
2 canvas and non-woven fabric.

2 13. The method of treating a power transmission belt/belt sleeve according
4 to claim 1 wherein the step of wrapping comprises the step of wrapping the at least
one sheet of vapor-impervious film spirally around the radially outwardly facing
4 surface of the belt/belt sleeve body.

2 14. A treating system comprising:
4 a belt/belt sleeve having an endless body with a length extending around an
axis and a radially inwardly facing surface and a radially outwardly facing surface;
6 at least one sheet of vapor-impervious film against and extending around the
8 radially outwardly facing surface of the belt/belt sleeve body; and
a vulcanizing vessel in which the belt/belt sleeve with the at least one sheet
of vapor-impervious film thereon resides and in which a vulcanization process can
be carried out.

2 15. The treating system according to claim 14 wherein the belt/belt sleeve
4 body has axially spaced, axially facing ends and the at least one sheet of vapor-
imperious film extends at least partially over the axially spaced, axially facing ends
4 of the belt/belt sleeve body.

16. The treating system according to claim 14 further comprising a mold
2 on which the belt/belt sleeve body is mounted.

17. The treating system according to claim 14 wherein the at least one
2 sheet of vapor-impervious film comprises a synthetic resin.

18. The treating system according to claim 14 wherein the belt/belt sleeve
2 body has axially spaced, axially facing ends which join to the radially outwardly
4 facing surface of the belt/belt sleeve body at first and second corners and the treating
system further comprises a sealing material which is applied over the vapor-
impervious film at at least one of the first and second corners.

19. The treating system according to claim 18 further comprising a mold
2 on which the belt/belt sleeve body is mounted, wherein the sealing material bridges
4 between the belt/belt sleeve and the mold at the at least one of the first and second
corners.

20. The treating system according to claim 18 wherein the sealing material
2 comprises at least one of rubber-impregnated canvas and non-woven fabric.

21. The treating system according to claim 14 wherein the at least one sheet of vapor-impervious film is spirally wrapped around the radially outwardly facing surface of the belt/belt sleeve body.

22. The treating system according to claim 14 wherein the radially inwardly facing surface of the belt/belt sleeve body has alternating grooves and teeth along the length of the belt/belt sleeve body.

